Intermediate Algebra Unit

Adding or Subtracting Rational Expressions with Like Denominators

Simplify each expression.

1) $\frac{n-6n}{24n^2} - \frac{n-1n}{24n^2}$

2) $\frac{4n+3n}{12n} - \frac{n+7n}{12n}$

3) $\frac{n+8n}{18n^2+7} - \frac{n+3n}{18n^2+7}$

4) $\frac{n+7n}{24n} - \frac{n+8n}{24n}$

5) $\frac{n+1}{9n+36} - \frac{n-2}{9n+36}$

6) $\frac{2n+2}{6n^2+n-12} + \frac{n-6}{6n^2+n-12}$

7) $\frac{8n-1}{12n^2+8n} + \frac{8n+1}{12n^2+8n}$

8) $\frac{2n-4}{2n^2-14n} + \frac{n-2}{2n^2-14n}$

9) $\frac{3n-5}{2n^2-21n+18} - \frac{n-2}{2n^2-21n+18}$

10) $\frac{n+4}{6n^2+24n^2} + \frac{n+4}{6n^2+24n^2}$

11) $\frac{n-5}{2n^2+n-15} + \frac{4}{2n^2+n-15}$

12) $\frac{6n}{4n^2-36n^2} - \frac{3n+12}{4n^2-36n^2}$

13) $\frac{4n+6}{n^2-2n-8} - \frac{2n+2}{n^2-2n-8}$

14) $\frac{3n+6}{2n^2+8n+6} - \frac{2n-7}{2n^2+8n+6}$

15) $\frac{4n+3}{36n^2+24n+12} - \frac{40n-7}{36n^2+24n+12}$

16) $\frac{5n-6}{n^2-10n+24} - \frac{6n-20}{n^2-10n+24}$